WHAT IS CLAIMED IS:

1. A method of recording information on an information medium which has a data area for recording stream data using stream packets each of which includes an application packet area containing one or more application packets with time stamps, and a management area for recording management information that pertains to the stream data, said method comprising:

distributing the stream data to the application packet areas in the stream packets so that the distributed stream data are recorded in the application packet areas,

wherein information recording is performed such that a start portion of the application packet area included in a first one of the stream packets of the stream data matches a first byte of the time stamp appended to a first one of the application packets in the application packet area.

2. A method of recording information on an information medium which has a data area for recording stream data using stream packs each of which includes an application packet area having one or more application packets with time stamps, and a management area for recording management information that pertains to the stream data, said method comprising:

distributing the stream data to the application packet areas in the stream packs so that the

distributed stream data are recorded in the application packet areas; and

when a blank portion is present at an end of the application packet area, providing a stuffing area

5   formed of a predetermined number of bytes in the blank portion.

3.   A method of recording information on an information medium which has a data area for recording stream data using stream packs each of which includes

10   an application packet area having one or more application packets with time stamps, and a management area for recording management information that pertains to the stream data, said method comprising:

distributing the stream data to the application

15   packet areas in the stream packs, and recording the distributed stream data in the application packet areas; and

as a result of recording the distributed stream data, if a blank portion of one or more of the stream

20   packs appears between an end of a last one of the stream packs that actually contains the stream data, and an end of the data area for recording the stream data, then recording a stuffing packet in the blank portion.

25   4.   An information recording method using an information medium which has a data area for recording stream data using data packets and data units each

being larger than the data packet, and a management

area for recording management information that pertains

to the stream data, said method comprising:

constituting the stream data by a plurality of the

5   data units;

constituting each of the data units by one or more

data packets each of which records predetermined time

stamp information; and

recording, in the management area, at least a time

10   difference value corresponding to a difference between

a first time stamp recorded in a first data unit and a

second time stamp recorded in a second data unit, said

first and second data units being included in a

plurality of said data units.

15   5.   A method according to claim 4, wherein the

time difference value is determined by rounding to a

predetermined number of effective digits a difference

between a time information value corresponding to the

second time stamp and a time information value

20   corresponding to the first time stamp.

6.   A method according to claim 4, wherein a value

of a first time stamp recorded in a first one of the

data packets located in the data unit is used to

compute the time difference value.

25   7.   A method according to claim 4, wherein a time

stamp recorded in the data packet at an end of a last

one of the data units included in the stream data

indicates an arrival time of a last one of the data packets in the last data unit, and the arrival time of the last data packet is used to compute the time difference value.

5   8.   An information recording method using an information medium which has a data area for recording stream data using data packets and data units each being larger than the data packet, and a management area for recording management information that pertains

10   to the stream data, said method comprising:

recording information of one or more cells in the stream data;

recording, in the management area, program chain information that describes a set of one or more of the

15   cells; and

recording, in the management area, information of an entry point which can be used as a marker of a skip position upon partially skipping recorded contents of the stream data in playback.

20   9.   A method according to claim 8, wherein the management area includes stream object general information which includes at least one of recording time information of the stream data, a data packet arrival time of a start portion of the stream data, and

25   a data packet arrival time of an end portion of the stream data.

10.   A data structure which has a data area for

recording stream data using predetermined data
recording units, and a management area for recording
management information that pertains to the stream data,
wherein

5   a plurality of stream packs, each of which
contains one or more of the data recording units with
time stamps, are provided, and the stream data are
distributed to these stream packs,

each of the stream packs contains a pack header
10   and a stream packet, and

a start portion of an application packet area
included in a first one of the stream packets of the
stream data matches a start byte of the time stamp
appended to a first one of the data recording units in
15   the application packet area.

11. A data structure according to claim 10,
wherein the stream packet includes a stuffing byte of a
variable length including zero byte length, and the
application packet area including one or more of the
20   data recording units with time stamps.

12. A data structure which has a data area for
recording stream data using data packets and data units
each being larger than the data packet, and a
management area for recording management information
25   that pertains to the stream data, wherein

the stream data are distributed to application
packet areas each including one or more of the data

packets, and

when a blank portion is present at an end of the application packet area, a stuffing area formed of a predetermined number of bytes is provided in the blank

5   portion.

13.   A data structure according to claim 12, wherein if a blank portion of one or more stream packs appears between an end of a last one of the stream packs that actually contains the stream data, and an

10   end of the data area for recording the stream data, then a stuffing packet is recorded as padding data in the blank portion.

14.   A data structure which has a data area for recording stream data using data packets and data units

15   each being larger than the data packet, and a management area for recording management information that pertains to the stream data, wherein

the stream data includes a plurality of the data units,

20   each of the data unit includes one or more of the data packets each recording time stamp information, and

a time difference value corresponding to a difference between a first time stamp recorded in a first data unit and a second time stamp recorded in a

25.   second data is recorded in the management area, said first and second data units being included in said data units.

15. A data structure according to claim 14, wherein the time difference value is determined by rounding to a predetermined number of effective digits a difference between a time information value corresponding to the second time stamp and a time information value corresponding to the first time stamp.

16. A data structure according to claim 14, wherein a value of a first time stamp recorded in a first one of the data packets located in the data unit is used to compute the time difference value.

17. A data structure according to claim 14, wherein a time stamp recorded in the data packet at an end of a last one of the data units included in the stream data indicates an arrival time of a last one of the data packets in the last data unit, and the arrival time of the last data packet is used to compute the time difference value.

18. A data structure which has a data area for recording stream data using a data packet and a data unit larger than the data packet, and a management area for recording management information that pertains to the stream data, wherein

one or more pieces of cell information are recorded in the stream data,

information of a program chain that describes a set of one or more cells is recorded in the management area, and

the management information includes information of an entry point which can be used as a marker of a skip position upon partially skipping recorded contents of the stream data in playback.

5   19. A data structure according to claim 18, wherein the management area includes stream object general information which includes at least one of recording time information of the stream data, a data packet arrival time of a start portion of the stream

10   data, and a data packet arrival time of an end portion of the stream data.